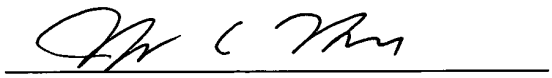
CONCLUSION

In light of the foregoing amendments and remarks, Applicants submits the application is now in condition for allowance, and an early notice to that effect is requested.

If any fees are due, the Commissioner is authorized to charge said fees to Conley, Rose, & Tayon, P.C. Deposit Account No. 501505/5150-55200/JCH.

Respectfully submitted,



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Attachment A of the Preliminary Amendment

The following paragraph shows changes made by replacement of the paragraph beginning on page 8, line 11.

[Figures 4A-4D illustrate example signals with Gaussian pulses, according to one embodiment;]

Figure 4 is a flowchart of a method for performing Time Domain Reflectometry using Gaussian pulses, according to one embodiment;

The following paragraph shows changes made by replacement of the paragraph beginning on page 8, line 13.

[Figure 5 is a flowchart of a method for performing Time Domain Reflectometry using Gaussian pulses, according to one embodiment;]

Figures 5A-5E illustrate example signals with Gaussian pulses, according to one embodiment;

Claims 42, 46, 66, and 70 have been amended as follows:

42. (Amended) The method of claim 40, wherein said generating a coarse estimate set of N parameters for the first modulated Gaussian pulse comprises:

a) determining a current area of interest of the received signal, wherein the current area of interest comprises a second sequence of values which includes at least a portion of the first sequence of values, and wherein the current area of interest comprises a start position and an end position;

b) selecting a current Gaussian window from a plurality of Gaussian windows, wherein the current Gaussian window comprises a third sequence of values representing a Gaussian waveform;

c) performing a windowed Fast Fourier Transform (FFT) using the selected Gaussian window and the determined area of interest to generate a power spectrum;

d) identifying a peak frequency amplitude from the power spectrum;

e) repeating a) through d) in an iterative manner until each of the plurality of Gaussian windows has been selected, thereby generating a plurality of peak frequency amplitudes;

f) identifying a maximum peak frequency amplitude from said plurality of peak frequency amplitudes; and

g) selecting an estimation Gaussian window from the plurality of Gaussian windows corresponding to said identified maximum peak frequency amplitude, wherein said coarse estimate set of N parameters of the Gaussian pulse is determined from the estimation Gaussian window.

46. (Amended) The method of claim [29] 30, wherein said one or more reflected pulses are generated by the Device Under Test (DUT) reflecting at least a portion of the initial modulated Gaussian pulse; and

wherein said [determined] refined set of parameters characterizing the Gaussian pulse and the one or more reflected Gaussian pulses are useable to characterize a connection discontinuity in the DUT.

66. (Amended) The memory medium of claim 54, wherein said generating a coarse estimate set of N parameters for the first modulated Gaussian pulse comprises:

a) determining a current area of interest of the received signal, wherein the current area of interest comprises a second sequence of values which includes at least a portion of the first sequence of values, and wherein the current area of interest comprises a start position and an end position;

b) selecting a current Gaussian window from a plurality of Gaussian windows, wherein the current Gaussian window comprises a third sequence of values representing a Gaussian waveform;

c) performing a windowed Fast Fourier Transform (FFT) using the selected Gaussian window and the determined area of interest to generate a power spectrum;

d) identifying a peak frequency amplitude from the power spectrum;

e) repeating a) through d) in an iterative manner until each of the plurality of Gaussian windows has been selected, thereby generating a plurality of peak frequency amplitudes;

f) identifying a maximum peak frequency amplitude from said plurality of peak frequency amplitudes; and

g) selecting an estimation Gaussian window from the plurality of Gaussian windows corresponding to said identified maximum peak frequency amplitude, wherein said coarse estimate set of N parameters of the Gaussian pulse is determined from the estimation Gaussian window.

70. (Amended) The memory medium of claim [53] 54, wherein said one or more reflected pulses are generated by the Device Under Test (DUT) reflecting at least a portion of the initial modulated Gaussian pulse; and

wherein said [determined] refined set of parameters characterizing the Gaussian pulse and the one or more reflected Gaussian pulses are useable to characterize a connection discontinuity in the DUT.